

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 18-0974-TF

Tariff filing of Green Mountain Power Corporation requesting a 5.45% increase in its base rates effective with bills rendered January 1, 2019, to be fully offset by bill credits through September 30, 2019

PREFILED DIRECT TESTIMONY OF

BRIAN E. WINN

ON BEHALF OF THE

VERMONT DEPARTMENT OF PUBLIC SERVICE

August 10, 2018

Summary: Mr. Winn provides an overview of the Department of Public Service's (the "Department") recommendation to reduce Green Mountain Power's requested revenue requirement by approximately \$3.4 million. Mr. Winn also discusses in detail the Department's recommendation regarding appropriate rate treatment for Green Mountain Power's proposed growth-related capital spending, introduces the testimony of the Department's witnesses, and briefly discusses innovative services.

Mr. Winn Sponsors the Following Exhibits:

Exhibit PSD-BEW-1: Professional Resume of Brian E. Winn

Exhibit PSD-BEW-2: GMP Standard and Poor's Presentation

Exhibit PSD-BEW-3: Near-term Rate Driver Analysis

Direct Testimony
Of
Brian E. Winn

1 **Q1. Please state your name, occupation, and business address.**

2 A1. My name is Brian E. Winn. I am the Director of Finance & Economics at the Vermont
3 Department of Public Service (the “Department” or “PSD”). My responsibilities include
4 direction of Utility Finance and Economics group activities for the Department and the
5 State of Vermont. My business address is 112 State Street, Montpelier, Vermont 05620.

6

7 **Q2. Please describe your educational background and experience.**

8 A2. I have a B.A. in Political Science from Purdue University, and a Master’s of Science in
9 Management from The Georgia Institute of Technology. I have worked at the
10 Department since July, 2016. Prior to joining the Department, I was employed with
11 Edison International or Southern California Edison, its regulated utility subsidiary, for
12 over twenty years. During my tenure there I held various positions including: Director of
13 Financial Planning and Analysis; Director of Business Analytics; Director of Performance
14 Management and Measurement; Director of Nuclear Financial Management; and Director
15 of SCE Budgets and Planning. Prior to Edison, I was a Utility Finance Consultant for
16 Energy Management Associates. My professional resume is included as Exhibit PSD-
17 BEW-1.

18

19

1 **Q3. Have you ever testified before the Vermont Public Utility Commission (the**

2 **“Commission or “PUC”)?**

3 A3. Yes, I have testified in Docket Nos. 8698/8710, 8827, 8871, 8881, 17-1238-INV, 17-
4 3112-PET, 17-5003-PET, 18-0409TF, and 18-0491-PET

6 **Q4. What is the purpose of your testimony?**

7 A4. In my testimony I discuss the organization of the Department’s case; summarize the
8 Department’s recommendations; discuss in detail the Department’s recommended rate
9 treatment for various Green Mountain Power (“GMP”) capital projects; recommend
10 improvements to GMP processes related to analysis of capital projects and power
11 procurement; discuss the Department’s recommendations for power supply costs and
12 short-term incentives; and introduce the Department’s witnesses.

14 **Q5. What has GMP requested in this proceeding?**

15 A5. GMP’s rate filing with the Commission consists of a base rate increase of 5.45 percent
16 which is offset by a onetime bill credit associated with returning excess Accumulated
17 Deferred Income taxes as a result of the recent federal tax legislation. The net result is a
18 decrease of 0.5 percent for rates starting January 1, 2019.

Q6. What is the Department's recommendation regarding the Company's requested rate increase?

A6. GMP filed a cost-of-service ("COS") that reflects a \$25.112 million revenue deficiency. The Department's overall conclusion is that there is a deficiency of \$21.687 million. Therefore, the Company's request of 5.45 percent is reduced to 4.7% percent. The table below summarizes the Department's proposed adjustments:

Summary of DPS Adjustments to GMP Cost-of-service

	<u>\$1,000</u>	<u>% Inc</u>
Revenue Deficiency per GMP COS	\$25,112	5.45%
DPS Adjustments to COS		
Regional Network Service Costs	(\$398)	
Depreciation & Amortization	(\$1,160)	
Taxes - Federal, State & Gross Receipts	(\$455)	
Return on Utility Rate Base	(\$1,954)	
Other Operating Revenue	\$541	
Total DPS Adjustments	(\$3,426)	
DPS COS Deficiency	\$21,687	4.70%

Q7. Please briefly summarize the reasons for the Department's proposed adjustments to GMPs Cost-of-service?

A7. The Department's recommendations largely reflect two general concerns: (1) GMP's rate of capital spending, and (2) a concern about the distribution of financial risk between GMP's shareholders and ratepayers as GMP continues develop and introduce new

1 innovative services. To be clear, the Department is largely supportive of GMP's
2 innovative efforts in support of state energy policy and the Department's
3 recommendations in this case should not be interpreted as discouraging GMP from
4 continuing to identify and implement innovative products, provided they will yield
5 tangible, and reliably quantifiable, benefits for GMP's ratepayers. However, the financial
6 risk associated with those projects must be appropriately balanced between ratepayers
7 and shareholders.

8
9 With respect to its specific recommendations, the Department proposes that the
10 Commission remove the Tesla Powerwalls, Heat Pump Water Heaters, certain T&D
11 projects, a portion of blanket projects and the "hold to sell" renewable energy credits
12 ("RECs") from rate base in the case, for a total rate base reduction of \$34.1 million.
13 Additionally, the Department is recommending that \$397,682 be removed from
14 Transmission costs to reflect actual Regional Network Service ("RNS") charges.

15
16 **Q8. Does the Department have any other recommendations for the Commission?**

17 A8. Yes. The Department's support for the Storage/Solar projects is contingent on GMP
18 providing ratepayers financial assurance that the projects will deliver the anticipated
19 economic benefits and that GMP indemnify the ratepayers for any financial consequences
20 should the proposed ratemaking or accounting be disallowed by the IRS. The
21 Department also recommends that the Commission require GMP to: (1) consider all
22 reasonable alternatives to proposed capital projects and solicit Requests for Proposals

1 (“RFPs”) when multiple vendors are available; (2) maintain adequate contemporaneous
2 information on the capital project planning and project approval processes; (3) improve
3 its methods for prioritizing reliability projects; and (4) follow a more structured process
4 for procuring energy and capacity resources including soliciting RFPs.

5
6 **Background and Overview**

7 **Q9. Please describe the Department’s investigation into the proposed change in rates?**

8 A9. After GMP made its rate filing, the Department organized a team composed of internal
9 resources and experts from GDS Associates, Inc. and J. Kennedy and Associates. The
10 team conducted a thorough review of the petition and supporting documentation, with a
11 focus on capital spending, power supply, cost of capital, and regulatory accounting. The
12 Department issued two rounds of discovery to the Company, engaged in a series of
13 meetings and conference calls with key GMP staff to exchange information, and
14 reviewed relevant Commission precedent.

15
16 **Q10. How is the Department’s testimony organized?**

17 A10. The Department is presenting testimony from eight witnesses. In my testimony I provide
18 a high-level summary of the entire case including: the Department’s recommendations; a
19 discussion of capital spending; and summaries of the recommendations of the other
20 witnesses. Ed McNamara, the Director of the Department’s Planning and Energy
21 Resources Division (“PERD”) provides a summary of the power supply portion of the
22 case and makes recommendations regarding GMP’s Regional Network Service (“RNS”)

1 charge and GMP's accounting treatment of RECs within rate base. Carol Flint, the
2 Director of the Department's Consumer Affairs and Public Information ("CAPI")
3 Division, provides an assessment of GMP's customer service. The remaining witnesses
4 are outside consultants that provide more detailed testimony in the areas covered by Mr.
5 McNamara and myself. Terry Myers of GDS provides an overview of the implications of
6 recent changes to the federal tax code and GMP's proposal to return a portion of its tax
7 savings as a credit during the upcoming rate year.

8
9 **Q11. Please provide some background on the regulatory landscape that is relevant**
10 **context for this case.**

11 A11. I will describe the regulatory landscape as it pertains to the capital spending, O&M, and
12 cost-of-capital portions of the rate case. In his testimony, Mr. McNamara provides a
13 summary of the regulatory landscape relevant to the power supply portion of the case.
14 GMP rates are set the way that most regulated utilities in the United States are, via a
15 proceeding to determine the appropriate cost-of-service, which in broad terms include
16 O&M expenses, purchased power costs, and return on rate base.

17
18 A substantial portion of GMP's O&M revenue requirement has been pre-determined
19 under a formula outlined in a June 15, 2012 Order from the Commission in Docket 7770,
20 which concerned the merger of GMP and CVPS. The Docket 7770 Order defines this
21 formula as "Base O&M costs," but it is generally referred to as the "O&M Platform." The

1 revenue requirement for this portion of GMP's rates will be determined under this Order
2 through 2022.

3
4 Furthermore, GMP has been operating under a temporary alternative regulation plan that
5 took effect in January of 2018, which includes mechanisms for purchased power, storms,
6 and exogenous events cost recovery; allows GMP flexibility to pilot innovative products
7 and services; and is in effect for 2 years, through the end of 2019. Since a large portion
8 of Purchased Power costs are long-term contracts that have been reviewed several times,
9 and because O&M costs are largely pre-determined under the O&M Platform, the
10 Department's review of the current case largely focuses on the impacts of capital
11 spending and investments in subsidiaries.

12
13 GMP filed a traditional rate case (Case 17-3112-INV) in 2017 for rates in effect in 2018.
14 During that case, the Department testified that the information available from the
15 Company was not sufficient to allow the Department to assess the reasonableness of the
16 proposed level of capital spending. In particular, the Department testified that the
17 Company was unable to produce complete financial analyses and other documentation
18 for approximately 69.7 percent of the capital projects reviewed by the Department.
19 Having such information available for review is essential for the Department to fulfill its
20 verification role in the rate case review process. As part of the Memorandum of
21 Understanding ("MOU") that the Commission approved in that case, GMP agreed to

1 maintain contemporaneous documentation of its capital spending decisions and to a set of
2 standards describing the required analysis of capital projects.

3
4 In June, GMP filed a proposal for a multi-year alternative regulation plan (Docket 18-
5 1633-PET) that will operate through 2022, if approved by the Commission. The plan
6 would be bookended by this pending rate case and a traditional rate case to be filed for
7 the 2023 rate year. There are numerous issues and details in the proposed plan that will
8 be reviewed and potentially revised as that case proceeds, and all components of the plan
9 are ultimately subject to Commission approval. However, some of the Department's
10 recommendations in this case are predicated on the existence of a multi-year rate plan.

11
12 **Q12. Can you provide any perspective on the main cost drivers contributing to the need**
13 **for the rate increase proposed in this case?**

14 A12. During the July 13, 2018 workshop for this case, Commission staff requested that the
15 Department address the rate drivers underlying GMP's rate request and attempt to tie any
16 recommended adjustments to those rate drivers.¹ First, I would like to provide some
17 perspective on complexities involved when trying to distill the primary reasons for
18 changes from a large list of numbers into a few key drivers. The summary cost-of-service
19 calculation is composed of over 25 cost items. Each of those items represents the
20 summation of a large subset of cost items and so on. When the overall percentage change

¹ Tr. 7/13/18 at 87 (Poppiti).

for a long list of numbers is relatively small, in a mathematical sense, there are numerous ways to combine the numbers to a handful of primary drivers. The same list of numbers is therefore subject to a wide range of interpretations of the primary drivers of the overall change. That is true for the GMP numbers in this case.

The Department used the following logic when summarizing the primary drivers. The Department has categorized cost-of-service by function, i.e. Power Costs, Transmission Costs, O&M, and made adjustments that account for the regulatory mechanisms used to recover the costs. Breaking down the costs using this logic results in these major categories.

Summary of GMP Adjustments to Cost-of-service - As Filed
In \$1,000s

	<u>Test Period</u>	<u>Rate Period</u>	<u>Dollar Change</u>
Purchased Power and Production	\$217,808	\$239,191	\$21,384
Net Transmission	\$19,408	\$32,196	\$12,788
O&M Platform, Other O&M and Savings	\$66,517	\$79,066	\$12,550
Rate Base Related Costs			
Depreciation & Amortization & Other	\$43,832	\$25,818	(\$18,013)
Taxes - Federal, State & Municipal	\$51,135	\$38,891	(\$12,245)
Return on Utility Rate Base	\$70,121	\$82,618	\$12,497
Less Affiliate & Other Operating Revenue	(\$37,640)	(16,201)	\$21,439
Gross Revenue & Fuel Gross Receipts Taxes	\$4,565	\$4,588	\$23
Cost to Ultimate Consumers	\$435,746	\$486,168	\$50,422

Most of the categories are straightforward and align well with the COS summary filed by GMP. Transmission O&M is shown net of the Equity in Earnings from Affiliates from

1 Transco/VELCO to reflect the non-rate base related cost of transmission. I have provided
2 a more detailed description of the cost-of-service line items included in each category in
3 Exhibit DPS-BEW-3.
4

5 **Q13. Does the analysis of the changes between the test period and proposed rate period**
6 **reveal the main drivers of GMP's rate increases?**

7 A13. Not in this this case. The Department recommends that the Commission take a longer
8 perspective when trying to determine the main drivers for the increase in GMP's rates. In
9 this case, both the test period and the rate period numbers represent only nine-month
10 periods and contain large one-time items that distort the overall trajectory of discrete
11 components of GMP's rates. For example, in the test period, the Affiliates & Other
12 Operating Revenue line contains a large one-time benefit of \$7.7 million related to a
13 Solar JV project. In the rate period, Depreciation & Amortization & Other line item there
14 are large one-time benefits associated with the Storage/Solar JV projects, totaling \$12
15 million, which reduce that line item significantly. The rate period also contains a one-
16 time benefit of approximately \$8.3 million from the VELCO sale of Utopus. Finally,
17 there is a significant difference in the federal tax rate for the test period and the rate
18 period. All these complications reduce the value of a straight test year to rate year
19 comparison. Nevertheless, my Exhibit PSD-BEW-3 attempts to provide the rate driver
20 analysis in the format requested by Commission staff during the workshop.
21

Q14. What does the Department's analysis of the longer rate trends show are the main drivers of GMP rate increases?

A14. The Department performed an analysis of the rate trends for the period 2013 through 2018 grouping the costs in the same manner as used above. The results are presented in the table below:

Comparison of Changes to GMP Cost of Service - 2013 Recorded to 2018 Settlement
In \$1,000s

	<u>2013 Test Year Actual</u>	<u>2018 Settlement</u>	<u>Dollar Change</u>	<u>Percent Change*</u>
Purchased Power and Production	\$322,603	\$289,154	(\$33,449)	-10.37%
Net Transmission	\$31,676	\$28,878	(\$2,798)	-8.83%
O&M Platform, Other O&M and Savings	\$117,541	\$104,571	(\$12,970)	-11.03%
Rate Base Related Costs				
Depreciation & Amortization & Other	\$45,611	\$53,270	\$7,659	16.79%
Taxes - Federal, State & Municipal	\$46,809	\$67,487	\$20,678	44.18%
Return on Utility Rate Base	\$66,673	\$98,535	\$31,862	47.79%
Less Affiliate & Other Operating Revenue	(\$33,282)	(\$21,583)	\$11,699	-35.15%
Gross Revenue & Fuel Gross Receipts Taxes	<u>\$6,094</u>	<u>\$6,266</u>	<u>\$172</u>	<u>2.82%</u>
Cost to Ultimate Consumers	\$603,724	\$626,580	\$22,854	3.79%

Over the period, Purchased Power Costs, over which GMP has some limited control, have declined by \$33.4 million. GMP has made progress in reducing O&M costs which have declined by almost \$13 million. Net Transmission costs have remained relatively stable with a \$2.8 million decline. However, these cost reductions, which total \$49.2 million, have been more than offset by a \$60.2 million increase in rate base (capital and investment) related costs, over which GMP has significant control. Given these trends,

1 the Department believes its recent focus on the level of GMP capital spending is well-
2 founded.

3
4 **Proposed Capital Spending & Investments**

5 **Q15. Why is the level of capital spending and investments in subsidiaries so important in**
6 **the GMP rate case?**

7 A15. GMP has experienced significant growth in capital investment, especially during the
8 years following its merger with Central Vermont Public Service Corp. ("CVPS"). Capital
9 spending and, in GMP's case, investment in subsidiaries are the primary components of
10 rate base. GMP rate base grew by 22.7 % from 2014 to 2017 and GMP projects that its
11 rate base will grow from \$1.165 billion in 2014 to \$1.564 billion in 2019, which
12 represents a 34.1% increase in less than 5 years. The table below shows GMP's actual
13 rate base from 2014 to 2017 and the projected rate base for 2019.

GMP TOTAL RATEBASE INVESTMENT - 2014 to 2019 (\$1,000)

<u>2014</u> ¹	<u>2015</u> ²	<u>2016</u> ³	<u>2017</u> ⁴	<u>2019</u> ⁴
\$1,165,784	\$1,209,349	\$1,264,195	\$1,430,213	\$1,563,786

¹8389 2014.11.14 GMP ESAM Filing.pdf, pg 8, Green Mountain Power - 2014 Earnings Sharing Adjustor, filed with the PUC on November 14, 2014. 13 month average as of September 2014.

²GMP FY2015 ESAM.pdf, pg 4, Green Mountain Power - 2015 Earnings Sharing Adjustor, filed with the PUC on November 20, 2015. 13 month average as of September 2015.

³GMP FY 2016 ESAM Filing, pg 4, Green Mountain Power - 2016 Earnings Sharing Adjustor, filed with the PUC on November 29, 2016. 13 month average as of September 2016.

⁴Case No. 18-0974-TF GMP-ER-1 Schedule2, 10 month average as of September each period.

1 In the Company's most recent presentation to Standard & Poor's from November of
2 2017, which is attached as Exhibit PSD-BEW-2, the Company forecasted capital
3 spending and investments in subsidiaries of \$534 million from 2018 through 2021. In
4 that same presentation, GMP forecasted retail revenues to grow by 20.46% from 2017 to
5 2021. Finally, the GMP Long-Term Executive Compensation Plan (produced during
6 discovery as (Attachment GMP.DPS1.Q20.c) sets explicit targets for growth in
7 "Investments Driving Customer Value" defined in the plan documents as "total utility
8 plant, net" plus "investment in associated companies," both of which are primary
9 components of rate base. The targets grow from \$1.73 billion for the period ending in
10 2017 to \$2.086 billion for the period ending in 2020. That amounts to 20.6% growth in
11 three years.

12
13 GMP is clearly planning to continue to significantly grow rate base. We know from the
14 analysis provided earlier in my testimony that growth in rate base is the single most
15 important driver of GMP rate increases. Therein lies the need for the Department and the
16 Commission to pay particular attention to the level of capital spending.

17
18 **Q16. How much capital spending and investment in subsidiaries has GMP proposed in**
19 **this case?**

20 A16. The Company has requested recovery for gross capital additions totaling \$119.9 million
21 for Q4 2017 through Q4 2018 and \$52.5 million for the 2019 rate period. GMP
22 investments in subsidiaries increase by \$143.1. The proposed capital spending and

1 investments in subsidiaries will increase the base rate revenue requirement (excluding the
2 impact of the lower tax rates and one-time credits) by approximately \$14.5 million from
3 the test year period.
4

5 **Q17. What is the Department's assessment regarding the level of capital investment and**
6 **capital projects of the Company?**

7 A17. There does not seem to be a clear operational reason for the level of rate base growth
8 considering that customer growth is very low, load is stagnant, and sales are declining.
9 Testimony from our expert witnesses, discussed in detail later, confirms this position. In
10 fact, in this case, GMP has proposed some investments, such as the Storage/Solar JV
11 projects, that have no clearly established operational need. Instead the company has
12 sought to justify the expenditures on primarily economic grounds.
13

14 **Q18. Has the quality of GMP documentation and evaluation of capital spending in this**
15 **proceeding improved over what was provided in the last case?**

16 A18. In some area yes and in others no. GMP has adopted the agreed upon template for capital
17 projects and provided more detail on blanket projects over \$250,000. GMP has also
18 provided additional capital review process data in the templates, including the
19 management personal that approved projects and the dates that projects were approved.
20 This additional information in the templates is very helpful for the Department's review
21 of projects and demonstrates improvement in the project support documentation.
22

1 However, Kevin Mara of GDS Associates conducted a review of GMP's capital spending
2 proposals and identified the following weaknesses in the support documentation: cost
3 estimate errors; failure to use an industry standard method to value and prioritize
4 reliability projects; insufficient data to justify capital spending proposals; unnecessary
5 capital projects; and overuse of blanket projects. Additionally, GMP did not evaluate, or
6 solicit requests for proposals for, viable alternatives to the Storage/Solar JV or Tesla
7 Powerwall projects. Mr. Mara discusses these issues in more detail in his testimony, but
8 the concerns he presents are consistent with issues that the Department has identified in
9 past cases.

10
11 **Q19. Do you support the proposed adjustment to Transmission, Distribution and General**
12 **Plant rate base discussed in the testimony of Kevin Mara of GDS Associates?**

13 A19. Yes. I am recommending that the Commission adopt the adjustments to T&D capital
14 spending included in the testimony of Kevin J. Mara, of GDS Associates Inc., which total
15 \$7.1 million. Mr. Mara's testimony includes a detailed by project discussion of the
16 rationale for excluding this amount.

17
18 **Q20. Please explain the Department's recommendation that \$12.16 million of blanket**
19 **projects be excluded from rate base.**

20 A20. In his testimony Mr. Mara testifies that he believes that \$42.5 million of the \$49.4 million
21 of proposed blanket capital projects could be excluded from rate base under the known
22 and measurable standard. Mr. Mara also found that including the blanket projects in rates

1 also eliminates the incentive for GMP to be efficient in design and construction. Mr.

2 Mara raised additional issues with the methods of estimating each of the different
3 categories of blanket projects.

4
5 The Department has raised concerns with GMP's use of blanket projects in prior cases
6 and is also concerned by the large increase in the use of blanket projects over the past few
7 years. However, the Department does not believe it would be appropriate to completely
8 remove the blanket projects in this case. First, the Commission has traditionally allowed
9 GMP to use blankets in traditional rate cases. Second, the Department is factoring in the
10 likelihood that this case may become the basis for a multi-year rate plan. In that event, it
11 would not be appropriate to defer recovery of costs contained within the blankets until the
12 next traditional rate case.

13
14 Given that the Department remains very concerned about GMP's use of the blanket
15 capital project categories, Mr. Mara was asked to provide the Department with an
16 analysis of the appropriate amount to include in rates for each of the blanket project
17 categories. The Department has reviewed his analysis and recommends the Commission
18 adopt the resulting adjustments totaling \$12.16 million.

19

20

21

1 **Q21. Please summarize the rationale for excluding Renewable Energy Credits from rate**
2 **base.**

3 A21. Certain renewable energy credits are created, with some regulatory lag, simply from the
4 operation of GMP generation assets or through purchased power contracts. Mr.
5 McNamara discusses the timing and procurement issues that lead to GMP carrying RECs
6 in rate base, and Mr. Myers raises an accounting concern with GMP's practice of holding
7 RECs in rate base. Based on their respective testimonies, the Department recommends
8 that \$4.08 of these credits be removed from rate base.
9

10 **Q22. Please explain the Department's recommendation that the Heat-Pump Water Heater**
11 **products be excluded from rate base.**

12 A22. First it is useful to provide some background. The Department supports the Company's
13 efforts to find innovative solutions to serve its customers' needs and promote state energy
14 policy. However, when a monopoly public utility offers commercially available
15 competitive products and services, an issue arises about the utility's impact on the
16 competitive market. For instance, in this case, GMP has included the costs associated
17 with the heat-pump water heaters in rate base.
18

19 As noted in prior cases, instead of requiring GMP to conduct this type of business in an
20 unregulated subsidiary, as is commonplace across the nation, the Department has
21 developed a list of conditions that should be met if generally available consumer products
22 are to be included in rate base. These requirements are: that the Company must have the

1 ability to control the usage of those products for the benefit of all ratepayers; benefits of
2 the program must exceed the costs to non-participating ratepayers; any bad debt expense
3 should be borne by the program or shareholders; and that GMP must open its billing
4 system to companies offering similar competing products. The Department and GMP
5 have discussed these conditions throughout the pilot review process, and ultimately these
6 discussions led to resolution in Docket 8794, in which GMP sought to tariff its heat pump
7 and heat pump water heater pilots.

8
9 The ability for GMP to exercise control of these products for the benefit of all ratepayers
10 was generally not implemented for heat-pump water heater products offered in 2016 and
11 part of 2017. The Company has stated that beginning in 2018, such control will be a
12 standard component of innovative products and services included in rate base. It has
13 become apparent since then that controls for these products are not generally available.
14 Additionally, it is not clear that the heat-pump water heaters' operating characteristics
15 will allow them to be efficiently controlled to create benefits for non-participating
16 customers. Until GMP has implemented the ability to control these devices for the
17 benefit of all ratepayers, the Department recommends excluding them from rate base to
18 remedy the competitive advantage created by the regulated rate of return on the
19 investment.

20
21

1 **Q23. Please explain the Department's recommendation that the Tesla Powerwall products**
2 **be excluded from rate base.**

3 A23. There are several significant concerns with this pilot program. The first is that the overall
4 size of the program is \$15.2 million. This is a significant portion of GMP's proposed
5 2019 capital budget. While there is no dollar limit on the size of pilot programs allowed
6 under GMP's current alternative regulation plan, a \$15.2 million investment in a project
7 with speculative and unknown benefits would appear excessive.

8
9 More importantly, the documentation that GMP provided in support of the Powerwall
10 project raises concerns as to whether the project will actually yield ratepayer benefit.
11 Christopher Dawson of GDS Associates reviewed the avoided cost models used by GMP
12 to justify both the Tesla Powerwall program and the Storage/Solar JV projects and has
13 concluded that: the resulting energy prices are optimistic beyond five years; the capacity
14 prices increases included in the model lack adequate foundation; REC price assumptions
15 are unproven and unrealistic on a long-term basis; and the assumed Transmission price
16 increases appear to be unsustainable. Mr. Dawson also concluded that GMP did not
17 perform any sensitivity analysis around the market price projections. His conclusions
18 raise concerns about the underlying analysis conducted by GMP to show that the program
19 will provide economic benefits. Furthermore, GMP did not adequately explore
20 alternatives to storage, such as demand response. Finally, GMP did not provide any
21 support indicating that it explored alternative vendors and did not solicit RFPs for this
22 program.

1 The significant cost of the Powerwall project coupled with the uncertainties of its
2 potential ratepayer benefits warrant removing this project from rate base in this case. The
3 Powerwall project should not be permanently disallowed; rather it would be appropriate
4 to allow for GMP to continue the project as a pilot and include its costs in rate base only
5 if GMP can demonstrate that the project actually achieves its intended benefits and is
6 ultimately approved by the Commission as a tariffed service. Mr. McNamara also
7 discusses the Powerwall pilot program in his testimony and provides additional support
8 for the Department's position that the Powerwall pilot program should be removed from
9 rate base in this case.

11 Power Supply

12 **Q24. Please summarize the Department's testimony regarding GMP's Power Supply**
13 **expenses.**

14 A24. Mr. McNamara and Mr. Christopher Dawson of GDS Associates address power supply
15 costs on behalf of the Department in their respective testimonies. Mr. McNamara
16 recommends that the Commission reduce GMP's power supply costs by \$397,682 to
17 account for a recalculation of GMP's Regional Network Service ("RNS") rate and GMP's
18 rate base by \$4.08 million to remove a portion of GMP's RECs from rate base.

19
20 Christopher C. Dawson of GDS Associates Inc. conducted a review GMP's power supply
21 costs and the markets forecasts used in the economic analysis of the Storage/Solar JV
22 projects and Tesla Power program. He concluded: GMP's hedging program is

1 insufficiently documented and structured; the market price analysis used in Storage/Solar
2 JV projects and Tesla Powerwall may not justify their investments; and that GMP has not
3 sufficiently evaluated Demand Response as a resource.

4
5 **Capital Structure and Cost of Capital**

6 **Q25. Please summarize the Company's requested cost of capital and capital structure.**

7 A25. GMP requests an authorized return on equity of 9.3 percent and a capital structure
8 consisting of 49.85 percent equity and 50.15 percent debt. The weighted average cost of
9 capital ("WACC") was estimated at 5.28 percent when factored for the nine-month rate
10 period. The Department's retained cost of capital witness, Rick Baudino of J. Kennedy
11 Associates, found that GMP's proposed ROE of 9.3% falls within his range of reasonable
12 returns. Accordingly, the Department does not recommend an adjustment to GMP's
13 proposed ROE. However, Mr. Baudino does recommend a slight reduction of GMP's cost
14 of debt from 5.07 to 5.03 percent.

15
16 **The Department's Revised Cost-of-Service ("COS")**

17 **Q26. Please summarize the Testimony of Jacob Thomas.**

18 A26. Mr. Jacob Thomas of GDS Associates has prepared a COS model to summarize the final
19 rate impact of the Department's recommendations. Mr. Thomas's COS model
20 incorporates adjustments to cost of capital, capital spending and power supply based on
21 information included in GMP's filing materials and discovery responses. Mr. Thomas's

1 model was also based off of GMP's own COS modeling, but the Department recognizes
2 that there may be minor inconsistencies in data from flow-through adjustments based on
3 the Department's recommendations. If necessary, the Department will update and
4 resubmit its COS model if any additional flow through adjustments need to be revised.
5

6 **Return of Accumulated Deferred Income Taxes Through a Bill Credit**

7 **Q27. What does this issue pertain to?**

8 A27. The federal tax reform that went into effect on January 1, 2018 lowered the corporate
9 federal income tax rate from 35% to 21%. This reduction has resulted in two major
10 impacts to GMP's cost-of-service. The first is, on a going forward basis, GMP will need
11 to collect less federal income tax from ratepayers. The second relates to Accumulated
12 Deferred Income Taxes ("ADIT") that were collected from rate-payers based on the old
13 tax rate. The amount of ADIT in excess of the new rate will be returned to ratepayers in
14 two ways. Some portion will be returned over multiple years based on the remaining life
15 of certain assets. GMP is also proposing that the other portion, \$27.4 million, be returned
16 to rate payers as a bill credit to be paid over the rate year.
17

18 **Q28. Does the Department Support GMP's proposed treatment of the excess**
19 **Accumulated Deferred Income Taxes?**

20 A28. Yes. Terry Myers of GDS Associates, Inc. performed an extensive review of the
21 analysis GMP performed in this area and found no issues. In fact, he indicated that the
22 GMP analysis was one of the most well prepared that he had seen. The Department

1 supports the proposal and appreciates GMP' proactive efforts to return the excess
2 accumulated deferred income taxes to ratepayers in a timely manner through one-time
3 bill credits in the current and proposed rate periods.

4
5 **Storage/Solar JV Projects**

6 **Q29. Does the Department have concerns about the process GMP used to evaluate the**
7 **need for the Storage/Solar projects?**

8 A29. Yes. GMP has not demonstrated that there is a physical system need (safety, reliability,
9 replace aging or damaged equipment, etc.) for this type of equipment. Although
10 originally proposed as microgrids, GMP did not propose installing the equipment needed
11 to isolate the circuits. In response to a discovery request in the Milton Microgrid
12 proceeding, Case No. 17-5003-PET, the company stated that:

13 GMP does intend to implement islanding capabilities with the Project,
14 recognizing that the costs and benefits of those activities are separate from
15 the base use cases (primarily peak load reductions and Frequency
16 Regulation) presented in the CPG application. *GMP wishes to emphasize*
17 *that the business case for the Project is based on the positive economics*
18 *described by the cost benefits analysis.* At the time that the scope of
19 providing islanding services have been fully analyzed, the costs and
20 benefits of providing those services to customers will be separately
21 identified and evaluated before proceeding. (Emphasis added)

22 Furthermore, GMP did not provide any support indicating that other alternatives to
23 battery storage were adequately considered and GMP did not solicit RFPs from
24 competing suppliers. Therefore, from the documentation provided in support of the
25 projects, it appears least-cost alternatives were not adequately explored, and the location
26 of these projects is not relevant in terms of engineering necessity or benefit.

1 **Q30. Does the Department believe that these projects will provide the projected economic**
2 **benefit to ratepayers?**

3 A30. The primary justification offered by GMP for these projects is the economic benefit to
4 rate payers however that benefit is subject to execution and market price risk. As
5 indicated earlier in my testimony, Mr. Dawson of GDS Associates has raised concerns
6 about the analysis showing that the project will provide economic benefits since the
7 market price forecasts were generally optimistic. The value of the projects is highly
8 dependent on factors such as market price, the success in timing of peaks and other
9 assumptions. The net present value ("NPV") is also impacted by the proposed non-
10 traditional ratemaking treatment of the developer fee and hypothetical book value at
11 liquidation ("HLBV"). In short, there is a significant risk that ratepayers will not receive
12 the projected economic benefits.

13
14 **Q31. Does the Department have reservations about the way GMP is accounting for the**
15 **year-one HLBV and developer fee?**

16 A31. Yes. Terry Myers of GDS Associates, Inc. raises a concern regarding how GMP is
17 treating the HLBV and the up-front developer fee when its Storage/Solar Joint-Venture
18 ("JV") projects are put in service. GMP currently uses this fee to reduce amortization,
19 which benefits ratepayers in the first year but results in higher costs in subsequent years,
20 resulting in an intergenerational inequity. The traditional ratemaking approach these
21 benefits would be to amortize them over the life the projects. Mr. Myers also indicates
22 that the IRS may determine that this upfront treatment violates its normalization rules. If

1 that is the case, GMP could lose its ability to use accelerated depreciation. The
2 Department's position is that this departure from the normal treatment requires specific
3 approval from the Commission. However, as discussed by Mr. McNamara in his
4 testimony, there are policy considerations that justify support for these projects, the
5 economics of which assume GMP's non-traditional accounting approach.
6

7 **Q32. What risks do the tax equity investors face?**

8 A32. Very little. The tax equity partner contributes cash to the Project upfront and in return,
9 receives most of the tax depreciation, ITC benefits, and rights to a small amount of the
10 cash flow from the project for the first five years.
11

12 **Q33. Do GMP investors face any risk that they will not earn their authorized return?**

13 A33. Once the project is added to rate base, GMP will earn its authorized rate of return over
14 the life of the project. Except for variations due to changes in GMP's authorized return
15 on equity, or other highly unlikely exogenous events, there is almost no risk associated
16 with those earnings. However, ratepayers bear a risk associated with the NPV due to the
17 length of the payback time and the volatility associated with the market price risk.
18

19 **Q34. Does the Department recommend that the JV projects be included in rate base, and**
20 **if so, is that recommendation subject to any conditions?**

21 A34. Yes, the Department supports inclusion of the JV projects in rate base, but that support is
22 contingent on the Commission ensuring an appropriate balance of equities between GMP

1 and its ratepayers. As Mr. McNamara discusses in his testimony, policy considerations
2 justify these projects. Developing these projects will provide GMP valuable experience
3 with designing and implementing modern renewable energy and storage projects.
4 Allowing these projects will also provide regulators with meaningful data on the actual
5 benefits of the new technologies that GMP is implementing with these projects.
6 Accordingly, the Department recommends that the JV microgrid projects be included in
7 rate base. However, the primary benefit for ratepayers being supported by GMP is
8 economic. GMP and the project investors will earn substantial returns with minimal risk.
9 These returns are backstopped by rate payer money and the rate payers are being asked to
10 bear a disproportionate amount of risk as compared to GMP and project investors. Again,
11 this is not like investing in a substation, transformers or poles, where ratepayers will
12 clearly receive operational benefits from the assets. This is a speculative investment
13 where the benefits are risky and purely economic. Therefore, consistent with its
14 recommendations from Case 17-5003-PET (the Milton microgrid § 248 case), the
15 Department recommends that the PUC require GMP to provide ratepayers financial
16 assurance for the asserted economic benefit to ratepayers of these projects. GMP should
17 also be required to indemnify ratepayers from any financial consequences that could
18 result from adverse IRS rulings relating to GMP's approach to the HLBV and developer
19 fees.

Forecasted Sales and Customer Growth Costs

Q35. Does the Department have an issue with GMP using forecasted sales for the 2019 rate period?

A35. Not in this case, especially if the Commission approves a multi-year rate plan for GMP. Although Commission precedent is clear for traditional ratemaking, the regulatory mechanics of operating under a multiyear rate plan make that precedent impractical for several reasons. First, depending on the design of the multi-year plan, there will be a need to create an annual sales forecast to flow through rate adjustments related to purchased power estimates. To avoid unnecessary volatility, prior period actual sales will need to be adjusted for known and measurable changes, such as significant known changes in loads, and will need to be weather normalized. Secondly, Mr. McNamara has done an extensive review of the forecasting methodology employed by GMP and has determined that it is an acceptable approach in this circumstance in light of current market conditions and GMP's sales trends.

Q36. Does the Department support the inclusion of costs related to customer growth for the 2019 rate period?

A36. In this circumstance yes. Again, if a multi-year rate plan is approved, it would be impractical to apply the traditional rate making approach of excluding customer growth related costs. It would require that GMP to incur multiple years of regulatory lag related to the recovery of the growth related costs; or require an annual adjustment mechanism to true-up to the actual growth related costs incurred.

1
2 **Q37. Please describe the appropriate ratemaking treatment for growth-related plant in**
3 **Vermont.**

4 A37. My understanding of the appropriate ratemaking treatment for growth-related plant
5 comes from *Tariff filing of Green Mountain Power Corporation*, Docket No. 5428, Order
6 of 1/4/91. In that case, GMP sought to include a number of capital additions in its rate
7 base that the Department argued were being put into service to serve new customers,
8 either in whole or in part. The Board set forth its rule of decision as follows:

9 The Board has previously held that since revenues from new customers
10 are not included in rate year income, expenses associated with serving
11 those customers should also be excluded. We apply that principle in this
12 case, but we do not extend it to exclude investments that are made to
13 maintain adequate and efficient service for test year customers and are
14 only incidentally available to serve new customers as well. We have
15 allowed inclusion of certain improvements which will be able to
16 accommodate some growth-related sales, where the record demonstrates
17 that the improvements were not undertaken in order to accommodate
18 growth, but were or are needed to maintain adequate and efficient service
19 for test year customers, absent any load growth.
20

21 *Id.* at 21.
22

23 **Q38. Is there any other circumstance where it is appropriate to consider growth-related**
24 **plant in establishing utility rates?**

25 A38. Yes. The rule is based on the need to match revenues and costs when setting rates, so that
26 the numerator (costs) is spread fairly across the appropriate denominator (sales). In the
27 case cited above, the Board achieved this by using test year sales and excluding growth-

1 related plant. Theoretically, you can achieve a similar matching using rate year
2 (projected) sales and including growth-related plant. This too, should achieve a matching
3 between revenues and sales. Because using projected figures has, in the past, been
4 considered less reliable than using known test-year figures, it makes sense as a general
5 matter to use the known test-year figures and exclude growth-related plant. In this case
6 the Department is satisfied that the method for forecasting sales is acceptable.

7
8 **Customer Service**

9 **Q39. Please summarize the Department's testimony regarding GMP's Customer Service?**

10 A39. Ms. Flint, the Department's CAPI Director, presents an overview of GMP's recent
11 customer service history including service reliability as well as an opinion of the
12 Company's provision of certain un-tariffed products and services. Ms. Flint does not
13 recommend any adjustments to GMP's cost-of-service.

14
15 **Q40. Does this conclude your testimony?**

16 A40. Yes.